Complete Summary

GUIDELINE TITLE

Acute pharyngitis in children.

BIBLIOGRAPHIC SOURCE(S)

Michigan Quality Improvement Consortium. Acute pharyngitis in children. Southfield (MI): Michigan Quality Improvement Consortium; 2004 Apr. 1 p.

GUIDELINE STATUS

Note: This guideline has been updated. The National Guideline Clearinghouse (NGC) is working to update this summary.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Acute pharyngitis, including group A beta hemolytic Streptococcus (GABHS) infection

GUIDELINE CATEGORY

Diagnosis
Evaluation
Management
Treatment

CLINICAL SPECIALTY

Family Practice
Internal Medicine
Otolaryngology
Pediatrics

INTENDED USERS

Advanced Practice Nurses
Health Plans
Physician Assistants
Physicians

GUIDELINE OBJECTIVE(S)

- To achieve significant, measurable improvements in the assessment, diagnosis, and treatment of acute pharyngitis through the development and implementation of common evidence-based clinical practice guidelines
- To design concise guidelines that are focused on key management components of acute pharyngitis to improve outcomes

TARGET POPULATION

High-risk and non-high-risk children and adolescents 2 to 18 years of age

INTERVENTIONS AND PRACTICES CONSIDERED

Assessment/Diagnosis

1. Assessment of past history of rheumatic fever or household contact with a history of rheumatic fever
2. Assessment of the likelihood of strep pharyngitis
3. Throat culture (TC) or Rapid Screen test

Management/Treatment

1. Throat culture or Rapid Screen negative: symptomatic treatment, avoid antibiotics
2. Strep pharyngitis:
    - Penicillin VK
    - Amoxicillin
    - Benzathine penicillin G
    - Erythromycin ethyl succinate or erythromycin estolate if penicillin allergic
    - Alternative treatment: cephalexin
3. Re-evaluation and referral to otolaryngologist, if necessary

MAJOR OUTCOMES CONSIDERED

Not stated

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The Michigan Quality Improvement Consortium (MQIC) project leader conducts a search of current literature in support of the guideline topic. Computer database searches are used to identify published studies and existing protocols and/or clinical practice guidelines on the selected topic. A database such as MEDLINE and two to three other databases are used.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Levels of Evidence for the Most Significant Recommendations

A. Randomized controlled trials
B. Controlled trials, no randomization
C. Observational studies
D. Opinion of expert panel

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Using the health plan guideline summaries and information obtained from the literature search, the Michigan Quality Improvement Consortium (MQIC) director

and/or project leader prepare a draft guideline for review by the MQIC Medical Directors.

The draft guideline and health plan guideline summaries are distributed to the MQIC Medical Directors for review and discussion at their next committee meeting.

The review/revision cycle may be conducted over several meetings before consensus is reached. Each version of the draft guideline is distributed to the MQIC Medical Directors, Measurement, and Implementation committee members for review and comments. All feedback received is distributed to the entire membership.

Once the MQIC Medical Directors achieve consensus on the draft guideline, it is considered approved for external distribution to practitioners with review and comments requested.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

External Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Once the Michigan Quality Improvement Consortium (MQIC) Medical Directors achieve consensus on the draft guideline, it is considered approved for external distribution to practitioners with review and comments requested.

The MQIC director also forwards the approved guideline draft to presidents of the appropriate state medical specialty societies for their input. All feedback received from external reviews is presented for discussion at the next MQIC Medical Directors Committee meeting. In addition, physicians are invited to attend the committee meeting to present their comments.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Note: This guideline has been updated. The National Guideline Clearinghouse (NGC) is working to update this summary. The recommendations that follow are based on the previous version of the guideline.

The level of evidence grades (A-D) are provided for the most significant recommendations and are defined at the end of the "Major Recommendations" field.

Facts

- 60 to 75% of pharyngitis cases in children are viral [C].
- The reason to treat Group A beta hemolytic Streptococcus (GABHS) is to decrease the risk of rheumatic fever [A].
- Presenting signs and symptoms can be used to determine the probability of GABHS.
- Confirm all negative rapid strep screens with a throat culture [C].
- A 10-day course of oral antibiotics is necessary.

Assessment

Assess past history of rheumatic fever (especially carditis/valvular disease) or household contact with a history of rheumatic fever to identify high risk patients.

If non-high risk, assess the likelihood of strep pharyngitis using the following six items--score 1 point if present:

- Absence of cough, rhinorrhea, and conjunctivitis
- Fever at least 38.3 degrees Celsius (100.9 degrees Fahrenheit) within last 24 hours
- Age 5 to 15 years
- Erythema, swelling, or exudates of tonsils or pharynx
- Tender anterior cervical nodes = 1cm
- Season is November to May [C]

Diagnosis

High Risk Patients

Start antibiotics immediately. If throat culture (TC) is obtained and is negative, stop antibiotics.

Non-High Risk Patients

Points: 0-1

Probability of GABHS: Low
Testing: None
Treatment: Symptomatic treatment only. Avoid antibiotics.

Points 2-4

Probability of GABHS: Intermediate
Testing: TC OR Rapid Screen (only use if immediate diagnosis is required[1])
Treatment:
If TC positive -- antibiotics; if TC negative -- symptomatic treatment only. Avoid

antibiotics.
If Rapid Screen positive -- antibiotics; if Rapid Screen negative -- culture and only use antibiotics if throat culture is positive.

Points 5-6

Probability of GABHS: High
Testing: None (only use culture or Rapid Screen if there is a need to confirm diagnosis[1])
Treatment: Start antibiotics immediately. If throat culture is obtained and is negative, stop antibiotics.

[1]E.G., to document an index case to treat symptomatic close contacts rapidly or if antibiotics fail

Treatment

Preferred Treatment for Strep Pharyngitis

1. Penicillin VK: 250 to 500 mg twice or three times daily (bid-tid) x 10 days
2. Amoxicillin: 20 to 40 mg/kg/day divided tid x 10 days [A]
3. Benzathine Penicillin G intramuscularly (IM) x 1: 600,000 units for weight <60 lbs; 1.2 million units for weight >60 lbs
4. If Penicillin allergic: Erythromycin Ethyl Succinate (EES): 40 mg/kg/day bid-four times daily (qid) (max 1 g/day) x 10 days; or Erythromycin Estolate: 20 to 40 mg/kg/day bid-qid (max 1 g/day) x 10 days

Alternative Treatment for Strep Pharyngitis

5. Cephalexin 15 to 50 mg/kg/day divided bid or tid x 10 days

Re-Evaluate/Referral

1. If failure to respond clinically after 48 hours of treatment, rule out peritonsillar or retropharyngeal abscess. If present, prompt otolaryngology (ENT) evaluation is recommended.
2. Assess the potential for a compliance problem.

Definitions:

Levels of Evidence for the Most Significant Recommendation

A. Randomized controlled trials
B. Controlled trials, no randomization
C. Observational studies
D. Opinion of expert panel

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence is provided for the most significant recommendations (see "Major Recommendations" field).

This guideline is based on several sources, including: the ICSI Acute Pharyngitis Guideline, Institute for Clinical Systems Improvement, 2001 (www.icsi.org).

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Through a collaborative approach to developing and implementing common clinical practice guidelines and performance measures for assessment, diagnosis, and treatment of acute pharyngitis in children, Michigan health plans will achieve consistent delivery of evidence-based services and better health outcomes. This approach also will augment the practice environment for physicians by reducing the administrative burdens imposed by compliance with diverse health plan guidelines and associated requirements.

POTENTIAL HARMS

Not stated

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

This guideline lists core management steps. Individual patient considerations and advances in medical science may supersede or modify these recommendations.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

When consensus is reached on a final version of the guideline, a statewide mailing of the approved guideline is completed. The guideline is distributed to physicians in the following medical specialties:

- Family Practice
- General Practice
- Internal Medicine
- Other Specialists for which the guideline is applicable (e.g., endocrinologists, allergists, pediatricians, cardiologists)

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

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ADAPTATION

This guideline is based on several sources including, the ICSI Acute Pharyngitis Guideline, Institute for Clinical Systems Improvement, 2001 (www.icsi.org).

DATE RELEASED

2004 Apr

GUIDELINE DEVELOPER(S)

Michigan Quality Improvement Consortium

SOURCE(S) OF FUNDING

Michigan Quality Improvement Consortium

GUIDELINE COMMITTEE

Michigan Quality Improvement Consortium Medical Director's Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Physician representatives from participating Michigan Quality Improvement Consortium health plans, Michigan State Medical Society, Michigan Osteopathic Association, Michigan Association of Health Plans, Michigan Department of Community Health, and Michigan Peer Review Organization

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

Note: This guideline has been updated. The National Guideline Clearinghouse (NGC) is working to update this summary.

GUIDELINE AVAILABILITY

Electronic copies of the updated guideline: Available in Portable Document Format (PDF) from the Michigan Quality Improvement Consortium Web site.

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI on November 28, 2005. The updated information was verified by the guideline developer on December 19, 2005.

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DISCLAIMER

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